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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,693	06/04/2004	Lloyd Ballard Mauldin		2692

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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
100 GALLERIA PARKWAY, NW  
STE 1750  
ATLANTA, GA 30339-5948

EXAMINER
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BOYKIN, TERRESSA M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/708,693

Applicant(s)

MAULDIN ET AL.

Examiner

Terressa M. Boykin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-39 is/are allowed.
- 6) ☒ Claim(s) 40-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/04;5/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by **US 6552123** col. 1-4, col. 7 line 41 through col. 8 line 55, and claim 1.

**US 6552123** discloses melt-spun fibers comprising, as at least one component, a water-soluble polyvinyl alcohol, and a method for producing fibrous structures comprising the fibers. The thermoplastic polyvinyl alcohol fibers comprise, as at least one component, a water-soluble polyvinyl alcohol containing from 0.1 to 25 mol % of C1-4 .alpha.-olefin units and/or vinyl ether units, having a molar fraction, based on vinyl alcohol units, of a hydroxyl group of vinyl alcohol unit located at the center of 3 successive vinyl alcohol unit chain in terms of triad expression of being from 70 to 99.9 mol %, having a carboxylic acid and lactone ring content of from 0.02 to 0.15 mol %, and having a melting point falling between 160.degree. C. and 230.degree. C., and contain from 0.0003 to 1 part by weight, relative to 100 parts by weight of the polyvinyl

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alcohol therein and in terms of sodium ion, of an alkali metal ion.

The reference also provides a method for producing thermoplastic polyvinyl alcohol fibers, which comprises melt-spinning the polyvinyl alcohol noted above at a spinneret temperature falling between melting point( $T_m$ ) and  $T_m+80$ .degree. C., at a shear rate ( $\gamma$ ) of from 1,000 to 25,000 sec.<sup>-1</sup>, and at a draft of from 10 to 500.

PVA for use in the invention may be prepared in any known method of bulk polymerization, solution polymerization, suspension polymerization, emulsion polymerization or the like. Of those, generally employed is a bulk polymerization method or a solution polymerization method in which the monomers are polymerized in the absence of a solvent or in the presence of a solvent such as alcohol or the like. The alcohol used as the solvent for solution polymerization includes, for example, lower alcohols such as methyl alcohol, ethyl alcohol, propyl alcohol, etc. The initiator to be used for copolymerization may be any known one, including, for example, azo-type initiators and peroxide-type initiators such as  $\alpha$ -,  $\alpha$ -azobisisobutyronitrile, 2,2'-azobis(2,4-dimethyl-valeronitrile), benzoyl peroxide, n-propyl peroxy carbonate, etc. The polymerization temperature may fall between 0.degree. C. and 150.degree. C. For PVA desired to be soluble in water at lower temperatures, the polymerization temperature is preferably not lower than 40.degree. C., more preferably not lower than 50.degree. C. However, if the polymerization temperature is too high, the degree of polymerization of PVA produced will be too low. Therefore, it is desirable that the polymerization temperature is not higher than 130.degree. C., more preferably not higher than 120.degree. C.

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The reference discloses that when preparing multi-component fibers, the polymers to be combined with PVA are preferably thermoplastic fibers having a melting point of not higher than 270.degree. C. For example, they include aromatic polyesters such as polyethylene terephthalate, polybutylene terephthalate, polyhexamethylene terephthalate, etc., and their copolymers; aliphatic polyesters and their copolymers such as polylactic acid, polyethylene succinate, polybutylene succinate, polybutylene succinate adipate, polyhydroxybutyrate-polyhydroxyvalerate copolymers, polycaprolactone, etc.; aliphatic polyamides and their copolymers such as nylon 6, nylon 66, nylon 10, nylon 12, nylon 6-12, etc.; polyolefins such as polypropylene, polyethylene, polymethylpentene, etc., and their copolymers; modified polyvinyl alcohol having from 25 mol % to 70 mol % of ethylene units; as well as polystyrene elastomers, polydiene elastomers, chlorine-containing elastomers, polyolefin elastomers, polyester elastomers, polyurethane elastomers, polyamide elastomers, etc. At least one of these polymers may be combined with PVA to give multi-component fibers.

Of those, preferred are polybutylene terephthalate, ethylene terephthalate copolymers, polylactic acid, nylon 6, nylon 6-12, polypropylene, and modified polyvinyl alcohol having from 25 mol % to 70 molt of ethylene units, as being readily multi-spun with PVA for use in the invention.

Thus, the reference discloses a polyolefin composition produced by the method as broadly claimed.

Any properties or characteristics inherent in the prior art, although unobserved or detected by the reference, would still anticipate the claimed invention. Note In re Swinehart, 169 USPQ 226. "It is elementary that the mere recitation of a newly discovered...property, inherently possessed by things in the prior art, does not cause

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claim drawn to those things to distinguish over the prior art".

Since the disclosed weight percent etc. are expressed differently and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that they are in fact different and whether such difference is unobvious.

Thus, there appears to be no significant difference between the reference(s) and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

### **Correspondence**

Please note that the cited U.S. Patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)) from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center at [Http:www.uspto.gov/ebc/index.html](http://www.uspto.gov/ebc/index.html) or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday at 9:00am to 4:00pm.

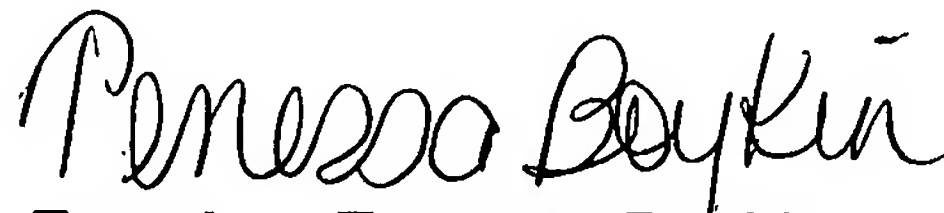
The fax phone number to the organization where this application or proceeding is assigned is 703 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private Pair or Public Pair. Status information for unpublished application is available through Private PAIR only. For more information

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about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 1 866-217-9197 (toll-free)

Tmb

A handwritten signature in black ink, appearing to read "Terressa Boykin". The signature is fluid and cursive, with the first name "Terressa" and last name "Boykin" clearly distinguishable.

**Examiner Terressa Boykin**  
**Primary Examiner**  
**Art unit 1711**